

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SG 2003/000298

CLASSIFICATION OF SUBJECT MATTER

IPC⁸: **H04L 27/26** (2006.01); **H04L 5/02** (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁸: H04L, H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC, XPI3E

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|----------|---|-----------------------|
| A | ATARASHI, H. et al. 'Variable Spreading Factor Orthogonal Frequency and Code Division Multiplexing (VSF-OFCDM).' In: Multi-Carrier Spread-Spectrum & Related Topics. Edited by K. Fazel et al. Dordrecht, NL: Kluwer Academic Publishers, 2002, pages 113-112. <i>section 2, figure 2.</i> | 1-12 |
| A | MAEDA, N. et al. 'Variable Spreading Factor-OFCDM with Two Dimensional Spreading that Prioritizes Time Domain Spreading for Forward Link Broadband Wireless Access.' In: IEEE Vehicular Technology Conference, 57th Semiannual Conference. VTC 2003-Spring. New York: IEEE, 22 April 2003 (22.04.2003), Vol.1, ISSN 1090-3038, pages 127-132. <i>section II.</i> | 1-12 |

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

„A“ document defining the general state of the art which is not considered to be of particular relevance

„E“ earlier application or patent but published on or after the international filing date

„L“ document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

„O“ document referring to an oral disclosure, use, exhibition or other means

„P“ document published prior to the international filing date but later than the priority date claimed

„T“ later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

„X“ document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

„Y“ document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

„&“ document member of the same patent family

Date of the actual completion of the international search

27 June 2006 (27.06.2006)

Date of mailing of the international search report

30 June 2006 (30.06.2006)

Name and mailing address of the ISA/AT

Austrian Patent Office

Dresdner Straße 87, A-1200 Vienna

Facsimile No. 1/53424/535

Authorized officer

LOIBNER K.

Telephone No. 1/53424/323

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SG 2003/000298

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| A | ALASTI, H. et al. 'A Discrete Multi Carrier Multiple Access Technique for Wireless Communications.' In: IEEE Vehicular Technology Conference, 48th Conference. VTC 98. New York: IEEE, 18 May 1998 (18.05.1998), Vol.2, pages 1533-1537. <i>section II, figures 2-4.</i> | 1-12 |
| A | WO 2003/034645 A1 (QUALCOMM INCORPORATED) 24 March 2003 (24.03.2003) <i>abstract, figures 3-6, paragraphs [1034]-[1072].</i> | 1-12 |
| A | US 2003/0137957 A1 (KAKURA, Y. et al.) 24 July 2003 (24.07.2003) <i>abstract, figures 1, 5, 7-9, paragraphs [0007]-[0043]; [0103]-[0115], [0149]-[0162].</i> | 1-12 |
| A | EP 1 130 840 A2 (KABUSHIKI KAISHA TOSHIBA) 5 September 2001 (05.09.2001) <i>abstract, figures 1, 5-9.</i> | 1-12 |
| A | EP 1 317 087 A1 (MATSUSHITA ELECTRIC INDUSTRIAL CO. LTD.) 4 June 2003 (04.06.2003) <i>abstract, figures 3, 4.</i> | 1-12 |
| | --- | |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/SG 2003/000298

| Patent document cited in search report | | | Publication date | Patent family member(s) | | | Publication date |
|---|----|-------------|---------------------|----------------------------|----|------------|---------------------|
| A | | | | none | | | |
| EP | A2 | 1130840 | 2001-09-05 | JP | A | 2001320346 | 2001-11-16 |
| | | | | US | A1 | 2001021182 | 2001-09-13 |
| EP | A1 | 1317087 | 2003-06-04 | US | A1 | 2003185179 | 2003-10-02 |
| | | | | WO | A1 | 03013039 | 2003-02-13 |
| | | | | CN | A | 1473408 | 2004-02-04 |
| | | | | JP | A | 2003046474 | 2003-02-14 |
| US | A | 20030137957 | | none | | | |